

species are known to exist. All five sites that support populations of *Zanthoxylum thomsonianum* are located on privately owned land. The continued existence of this species is endangered by its very limited numbers plus potential habitat modifications or destruction due to limestone mining, urbanization, and road maintenance. This proposal, if made final, would implement the protection provided by the Endangered Species Act of 1973, as amended, for *Zanthoxylum thomsonianum*. The Service seeks data and comments on this proposal.

**DATES:** Comments from all interested parties must be received by April 12, 1985. Public hearing requests must be received by March 28, 1985.

**ADDRESSES:** Comments and materials concerning this proposal should be sent to the Caribbean Islands Field Supervisor, U.S. Fish and Wildlife Service, P.O. Box 3005—Marina Station, Mayaguez, Puerto Rico 00709-3005. Comments and materials received will be available for public inspection, by appointment, at this office during normal business hours, and at the Service's Regional Office, Suite 1282, 75 Spring Street, SW., Atlanta, Georgia 30303.

**FOR FURTHER INFORMATION CONTACT:** Mr. Agustin P. Valido at the Atlanta Regional Office address, 404/221-3583, FTS 242-3583.

**SUPPLEMENTARY INFORMATION:**

**Background**

*Zanthoxylum thomsonianum* was first described by Krug and Urban in 1896, on the basis of a specimen collected by Eggars in St. Thomas (now part of the U.S. Territory of the Virgin Islands) in 1880. The species was not collected again in St. Thomas until 1980 (Vivaldi and Woodbury, 1981). It was collected by Britton and Shafer on St. John, Virgin Islands, in 1913 and found there again by Woodbury in 1983. It was also discovered by Woodbury in the early 1960's at the summit of Piedras Chiquitas (a rocky outcrop between the municipalities of Salinas and Coamo) and along Road 155, north of Coamo, Commonwealth of Puerto Rico. More recently, it was discovered by a high school teacher in the upper part of the Guajataca Gorge in Isabel, Puerto Rico.

The population at Piedras Chiquitas is no longer extant, perhaps destroyed by hurricane winds as recently as 1979, when hurricanes David and Frederick passed near Puerto Rico. The population along Road 155 was partially destroyed as a result of road improvement and maintenance activities. Only two individuals of the species are known to

**50 CFR Part 17**

**Endangered and Threatened Wildlife and Plants; Proposed Endangered Status for *Zanthoxylum thomsonianum* (Prickly-ash)**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Proposed rule.

**SUMMARY:** The U.S. Fish and Wildlife Service proposes to determine a plant, *Zanthoxylum thomsonianum* (prickly-ash), to be an endangered species under the authority of the Endangered Species Act, as amended. *Zanthoxylum thomsonianum* is only found in seasonally deciduous vegetation formations that occur on limestone and on areas of volcanic origin in northern and central Puerto Rico and southern St. Thomas and St. John, Virgin Islands. Only about 1,050 individuals of the

exist in the Guajataca Gorge locale. The largest known population is located on the southern coast of St. Thomas and consists of several hundred individuals. Recently, about 50 individuals were found at Gift Hill in St. John, and a single specimen was found about ¼ mile north of Salt Pond Bay, also in St. John (Woodbury, personal communication).

*Zanthoxylum thomasianum* was recommended for Federal listing by the Smithsonian Institution (Ayensu and DeFilipps, 1978). In August 1979, the Service contracted with Dr. Jose L. Vivaldi, a resident botanist of Puerto Rico, to conduct a status survey of plants considered to be candidates for listing as endangered or threatened in Puerto Rico and the Virgin Islands. Reports and documentation resulting from this survey recommended that *Zanthoxylum thomasianum* be proposed for listing as an endangered species. *Zanthoxylum thomasianum* was included among the plants being considered for listing as endangered or threatened species by the Fish and Wildlife Service, as published in the Federal Register (45 FR 82479) dated December 15, 1980.

In a notice published in the Federal Register on February 15, 1983 (48 FR 6752), the Service reported the earlier acceptance of the new taxa in the Smithsonian's 1978 book as under petition within the context of Section 4(b)(3)(A) of the Act, as amended in 1982. The Service subsequently found that listing *Zanthoxylum thomasianum* was warranted but precluded by other pending listing actions, in accordance with Section 4(b)(3)(B)(iii) of the Act; notification of the finding was published in the January 20, 1984, Federal Register (49 FR 2485). This proposed rule indicates that the petition action is warranted, and constitutes the required finding in accordance with Section 4(b)(3)(B)(ii) of the Act.

#### Summary of Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (49 FR 38900, October 1, 1984, to be codified at 50 CFR Part 424) set forth the procedures for adding species to the Federal lists. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in Section 4(a)(1). These factors and their application to *Zanthoxylum thomasianum* (Krug and Urban) P. Wilson, prickly-ash, are as follows:

A. *The present or threatened destruction, modification or curtailment*

*of its habitat or range.* Modification and destruction of habitat appear to be the most serious threats to the species, especially in St. Thomas and St. John, Virgin Islands, and in Coamo, Puerto Rico. The St. Thomas population is located in an area close to the capital, Charlotte Amalie, and to some of the principal hotel complexes serving the tourist trade. The plants are located on property of potential importance to tourism on a small island where land value is high. This particular area has been subdivided into lots, and plans to clear the lots and build are being formulated. The principal St. John site, with about 50 individuals, is located in the Gift Hill area of Fish Bay Estates. This area has also been subdivided into lots. Only one specimen is known to exist in the other location on St. John. The plant occurs on land which is not in use, north of Salt Pond Bay. However, the area has the same development potential and value as the other site in St. John. Subdivision and development of the land, unless done with consideration and care, could either destroy or substantially modify habitat upon which individuals of *Zanthoxylum thomasianum* depend. The Coamo population was partially destroyed by activities related to road improvement and the unauthorized deposit of trash, much of which was burned, near the road. Only four individuals remain of what used to be a much larger population.

Habitat modification can also be expected in the Guajataca Gorge site. Local residents use the area for planting yams, which results in *Zanthoxylum thomasianum* plants being uprooted. Nearby limestone hills are being mined for fill material. The hill where the plants are located could be razed in order to offer limestone fill for sale. These activities could destroy or adversely modify the species' habitat.

B. *Overutilization of commercial, recreational, scientific, or educational purposes.* Taking for these purposes has not been a documented factor in the decline of this species, but could easily become so in the future. The species occurs near habitations. Professional cultivation from cuttings has failed, and tissue culture has not been attempted.

C. *Disease or predation.* Disease and predation have not been documented as factors in the decline of the species.

D. *The inadequacy of existing regulatory mechanisms.* The Commonwealth of Puerto Rico does not have specific legislation or rules to protect endangered or threatened plant species, although a list of vulnerable species exists. If mining activities become involved, the Department of

Natural Resources presumably could prohibit such activities in order to save a particular site by making reference to Law 144, June 3, 1976, "Extracción de materiales de la corteza terrestre," which regulates mining activities. However, whether or not this prohibition could be used to control the taking of an endangered plant would depend on the interpretation of the law of Commonwealth courts. There is no established precedent, and the protection this law provides to the species is probably minimal. The government of the Virgin Islands does not have specific rules or legislation to protect endangered or threatened plant species.

E. *Other natural or manmade factors affecting its continued existence.*

*Zanthoxylum thomasianum* is found in small, compact, localized populations. The species is dioecious, the ratio of male to female plants is unknown, and its ecological requirements are poorly understood. The two Puerto Rican populations are small, relict populations and probably too small to guarantee the survival of a dioecious species. Hurricanes have affected the species in the past, as evidenced by the destruction of the former Piedras Chiquitas population. Individuals in exposed areas, such as coastal hills, may be adversely affected by high winds. These factors make *Zanthoxylum thomasianum* even more vulnerable to the previously mentioned threats.

The Service has carefully assessed the best scientific information available, regarding the past, present, and future threats faced by this species, in determining to propose this rule. Based on this evaluation, the preferred action is to list *Zanthoxylum thomasianum* as endangered. With so few known individuals and with such a high risk of damage to the plant and/or its habitat, endangered status seems an accurate assessment of the species' condition. It is not prudent to propose critical habitat because doing so would increase risk for the species, as detailed in the next section.

#### Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that to the maximum extent prudent and determinable, the Secretary designate any habitat of a species which is considered to be critical habitat at the time the species is determined to be endangered or threatened. The Service finds that designation of critical habitat is not prudent for this species at this time. As discussed under factor B above, *Zanthoxylum thomasianum* is potentially threatened by collecting, an

activity regulated by the Endangered Species Act with respect to plants only on lands under Federal jurisdiction; such lands are not involved in this proposal. Publication of critical habitat localities along the road where the species occurs would increase the risk of taking or vandalism. The small sizes of populations exacerbate these risks. Therefore, it would not be prudent to determine critical habitat for *Zanthoxylum thomsonianum* at this time.

#### Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, Commonwealth, Territory, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition, cooperative efforts with the Commonwealth and Territory, and requires that recovery actions be carried out for all listed species. Such actions are initiated by the Service following listing. The protection required of Federal agencies and the prohibitions against taking are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR Part 402, and are now under revision (see proposal at 48 FR 29990; June 29, 1983). Section 7(a)(4) requires Federal agencies to informally confer with the Service on any action that is likely to jeopardize the continued existence of a proposed species. If a species is subsequently listed, Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of such a species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species, the responsible Federal agency must enter into formal consultation with the Service. No critical habitat is being designated for *Zanthoxylum thomsonianum*, as discussed above, and the only Federal involvement known at this time with habitat it occupies is that of the Federal Highway Administration. In the event that highways are widened or resurfaced in this area, a strong commitment, together with funds, will

be needed to protect *Zanthoxylum thomsonianum*. Without the protection provided by the Act, the species could be brought to extinction or its habitat substantially modified. Road designers and work crews would need to be alerted so that the plants are taken into consideration in any plans for the reconstruction of nearby roads. Such work should be done with utmost care and would require that the habitat of *Zanthoxylum thomsonianum* be left undamaged. It is not known whether there would be any Federal involvement in the proposed subdivision developments. Any Federal authorization, funding, or participation in these projects would be subject to the provisions of Section 7 of the Act, as discussed above.

The Act and its implementing regulations found at 50 CFR 17.61, 17.62, and 17.63 set forth a series of general trade prohibitions and exceptions that apply to all endangered plant species. With respect to *Zanthoxylum thomsonianum*, all trade prohibitions of Section 9(a)(2) of the Act, implemented by 50 CFR 17.61, would apply. These prohibitions, in part, would make it illegal for any person subject to the jurisdiction of the United States to import or export, transport in interstate or foreign commerce in the course of a commercial activity, or sell or offer for sale this species in interstate or foreign commerce. Certain exceptions can apply to agents of the Service and Commonwealth and Territory conservation agencies. The Act and 50 CFR 17.62 and 17.63 also provide for the issuance of permits to carry out otherwise prohibited activities involving endangered species under certain circumstances. International trade and interstate commercial trade in *Zanthoxylum thomsonianum* are not known to exist, and the plant is very rare in experimental cultivation. It is anticipated that few trade permits would ever be sought since the species is not common in cultivation or in the wild.

Section 9(a)(2) (B) of the Act, as amended in 1982, prohibits the removal and reduction to possession of endangered plant species from areas under Federal jurisdiction. The new prohibition will apply to *Zanthoxylum thomsonianum*. Permits for exceptions to this prohibition are available through Section 10(a) of the Act, until revised regulations are promulgated to incorporate the 1982 Amendments. Proposed regulations implementing this new prohibition were published on July 8, 1983 (48 FR 31417), and it is anticipated that will be made final

following public comment. *Zanthoxylum thomsonianum* is not known to occur on any Federal lands at this time, so requests for taking permits are not anticipated. Requests for copies of the regulations on plants and inquiries regarding them may be addressed to the Federal Wildlife Permit Office, U.S. Fish and Wildlife Service, Washington, D.C. 20240 (703/235-1903).

If this species is listed under the Act, the Service will review its status to determine whether it should be placed on the Annex to the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, which is implemented through Section 8A(e) of the Act, and whether it should be considered under other appropriate international agreements.

#### Public Comments Solicited

The Service intends that any final rule adopted will be accurate and as effective as possible in the conservation of endangered or threatened species. Therefore, any comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, private interests, or any other interested party concerning any aspect of these proposed rules are hereby solicited. Comments particularly are sought concerning:

- (1) Biological, commercial trade, or other relevant data concerning any threat (or lack thereof) to *Zanthoxylum thomsonianum*;
- (2) The location of any additional populations of *Zanthoxylum thomsonianum* and the reasons why any habitat of this species should or should not be determined to be critical habitat as provided by Section 4 of the Act;
- (3) Additional information concerning the range and distribution of this species; and
- (4) Current or planned activities in the subject area and their possible impacts on *Zanthoxylum thomsonianum*.

Final promulgation of a regulation on *Zanthoxylum thomsonianum* will take into consideration the comments and any additional information received by the Service, and such communications may lead to adoption of a final regulation that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be filed within 45 days of the date of the proposal. Such requests must be made in writing and addressed to the Caribbean Islands Field Supervisor, U.S. Fish and Wildlife Service, P.O. Box 3005—Marina Station,

Mayagüez, Puerto Rico 00709-3005 (809/833-5760).

#### National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined by the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to Section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the Federal Register on October 25, 1983 (48 FR 49244).

#### Literature Cited

Ayensu, E.S., and R.A. DeFilipps. 1978.

Endangered and Threatened Plants of the United States. Smithsonian Institution and World Wildlife Fund, Washington, D.C. xv + 403 pp.

Vivaldi, J.L., and R.O. Woodbury. 1981. Status report on *Zanthoxylum thomsonianum* (Krug and Urban) P. Wilson. Status Report submitted to the U.S. Fish and Wildlife Service, Mayagüez, P.R. 39 pp.

#### Author

The primary author of this proposed rule is Mr. Agustin P. Valido, U.S. Fish and Wildlife Service, Suite 1282, 75 Spring Street, S.W., Atlanta, Georgia

30303. Status information and a preliminary draft of the rule were provided by Dr. José L. Vivaldi, Cond. Parque de Las Fuentes, Hato Rey, Puerto Rico. Dr. George Drewry of the Service's Washington Office served as editor.

#### List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

#### Proposed Regulation Promulgation

#### PART 17—[AMENDED]

Accordingly, it is hereby proposed to amend Part 17, Subchapter B of Chapter

#### I. Title 50 of the Code of Federal Regulations, as set forth below:

1. The authority citation for Part 17 reads as follows:

Authority: Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 96-159, 93 Stat. 1225; Pub. L. 97-304, 96 Stat. 1411 (16 U.S.C. 1531 *et seq.*).

2. It is proposed to amend § 17.12(h) by adding the following, in alphabetical order, under Rutaceae to the List of Endangered and Threatened Plants:

#### § 17.12 Endangered and threatened plants.

\* \* \* \* \*

(h) \* \* \*

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
Rutaceae—Rue Family:						
<i>Zanthoxylum thomsonianum</i> (= <i>Fagara thomsonianum</i> ).	Prickly-ash	U.S.A. (PR, VI)...	E		NA	NA

Dated: January 18, 1985.

J. Craig Potter,

Acting Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 85-3415 Filed 2-8-85; 8:45 am]

BILLING CODE 4310-55-M